Spring 2-1-2019

M 221.02: Introduction to Linear Algebra

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University of Montana, Missoula

M 221-02 LINEAR ALGEBRA SPRING SEMESTER 2019

This syllabus contains information about this class. Please read this carefully and keep it for future reference (in case you loose it, a copy of the syllabus will be posted on the class Moodle page). In case you have questions, please do not hesitate to ask me. A good time for questions is right after class or during office hours.

INSTRUCTORS: Javier Perez Alvaro (Office: Math 205A, Phone: 243–5562)
Email: javier.perez-alvaro@mso.umt.edu

OFFICE HOURS: See http://www.umt.edu/people/perezalvaro for up-to-date office hours

PREREQUISITE: M172 or M182, or consent of instructor

MOODLE PAGE: https://moodle.umt.edu/course/view.php?id=25769
Homework assignments and other information pertinent to this course will be posted at this web site.

TEXT: *Introduction to Linear Algebra*, by Gilbert Strang.

LEARNING OUTCOMES: The learning goals for this course are:

- Solve systems of linear equations and solve matrix equations;
- Identify linearly dependent and independent sets of vectors;
- Compute bases for column, row and null spaces;
- Represent linear transformations with matrices;
- Compute and use determinants;
- Compute eigenvalues and eigenvectors, and determine if a matrix is diagonalizable;
- Determine and use orthogonality;
- Use linear algebra to solve basic applied problems;
- Prove elementary statements in linear algebra.

GRADING:

- TESTS: There will be three 50 minute in-class exams during the semester. All of these exams are closed book exams.
- FINAL EXAM: There will be a final exam on all material covered in the course.
- HOMEWORK: There will be by-weekly homework assignments.

ASSESSMENT: 15% Homework
60% Three Exams
25% Comprehensive Final Exam

GRADE SCALE:

$\geq 93\%$	90%	87%	83%	80%	75%	70%	65%	62%	58%	55%	$\leq 55\%$
A	A^-	B^+	B	B^-	C^+	C	C^-	D^+	D	D^-	F

UNIVERSITY DATES AND DEADLINES: You should be aware of the important dates and deadlines posted by the **Registrar's Office**.

IMPORTANT NOTE: Announcements made in class are considered addenda to this syllabus. Make sure you stay informed as to the progress of the class.

HONESTY: All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at http://www.umt.edu/vpesa/Dean of Students/default.php.

ACCOMMODATION: The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors and Disability Services for Students (DSS). If you think that you may have a disability adversely affecting you academic performance, and you have not already registered with DSS, please contact DSS in Lommassen 154. I will work with you and DSS to provide an appropriate accommodation.